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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/791,165 | 03/02/2004 | Thomas Fink | WEI0081 | 3398 |

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BAKER & DANIELS LLP
111 E. WAYNE STREET
SUITE 800
FORT WAYNE, IN 46802

EXAMINER

KNOX, STEWART

ART UNIT PAPER NUMBER

3641

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/791,165 | FINK ET AL. | |
| | Examiner | Art Unit | |
| | Stewart T. Knox | 3641 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 and 22-45 is/are pending in the application.
- 4a) Of the above claim(s) 12-17, 24-29 and 34-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-11, 18-20, 22, 23, 30-33, 44 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 2 recites an internal surface contour describing the final geometry of the opening, produced by the separation process of claim 44. There is no indication of what contour would be produced by a separation process, so it is unclear what contour defines the opening.

Claim Rejections - 35 USC § 102

4. Claim 44, 45, 2-10, 23, and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Flickinger (5,732,634). Flickinger discloses a bushing assembly capable of use with igniters of airbags or belt tensioner pulleys, comprising a stamped metal base plate (figure 5, element 8) having an opening therein (in which element 9' is placed), said base plate being formed by a single element, at least two metal pins (10) in parallel arrangement extending from the rear side of the base plate and being fixed in the opening by a glass plug fixing material (9', col. 5 lines 60-65) in the opening, or firmly connected with the fixing material, or sealed with the fixing material, where the retention structure comprises at least one positive interlocking connection (pictured on

the left side of the opening in figure 5) between the fixing material and a part of the opening. One of the metal pins is also grounded to a rear side of the base plate, or in a socket of the base plate which is grounded.

5. Flickinger discloses retention structure being provided between the front and rear sides of the base plate for prevention of motion of the fixing material relative to the base in a direction toward the rear side along the inner circumference of the opening (shelf portion of the plate where it contacts 9', unlabeled), where the retention structure is an integral component of the base plate or forms a structural unit with the base plate.

6. Flickinger further discloses the retention structure comprising at least one undercut between the rear and front side on the inner circumference of the opening in the base plate, wherein the undercut is formed by at least one projection (the shelf, unlabeled).

7. Flickinger further discloses two sub-areas, the second with lesser inner dimensions than the first, wherein the projection is formed by the second sub-area and both sub-areas have unchanging geometry with constant inner dimensions over their length.

8. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps; "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product

was made by a different process." *In re Thorpe*, 777 F.2d 695, 227 USPQ 964.

Regarding the process for making the claimed opening and the glass plug or the **Product by Process** Claims, applicant is directed to MPEP § 2113. Therefore opening being formed by at least one separation process and the glass plug being formed from molten glass is not pertinent in this instance to the patentability of this product claim.

Claim Rejections - 35 USC § 103

9. Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger as applied to claims 44, 8, and 9 above, and further in view of Junji (WO 03083404). Flickinger teaches the claimed invention except for sub-areas with variable geometry or a plurality of projections. Junji teaches two or more sub-areas with variable geometry (all figures), some of which includes a plurality of projections arranged circumferentially about said pin at a location between the front and rear sides (figures 10 and 11). Junji does not explicitly state why this is done, but it appears to be in order to provide different analogous means for fitting the plug in the base plate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the retention structure of Flickinger to have many varying shapes including a number of projections as taught by Junji since such a modification would provide the retention structure with equivalent retaining functions in an analogous art setting.

10. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being obvious over Flickinger and Junji as applied to claims 44, 8, and 9 above. Flickinger and Junji disclose the claimed invention but do not expressly disclose the opening being either a

circular or non-circular cross section. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the opening as taught by Flickinger and Junji to be either circular or non-circular, because Applicant has not disclosed that a circular or non-circular opening provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with any reasonably shaped opening, because it provides for accommodation of many differently shaped fixing plugs or variable geometry metal pins, and since it appears to be an arbitrary design consideration which fails to patentably distinguish over Flickinger or Junji.

11. Therefore, it would have been an obvious matter of design choice to modify Flickinger or Junji to obtain the invention as specified in the claims.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger as applied to claim 44 above, and further in view of Kubozuka (US Pub No 2002/0174792). Flickinger teaches the claimed invention except for the metal base plate being polished. Kubozuka teaches polishing the metal base plate of an igniter assembly (paragraph 47). Kubozuka does not explicitly say why this is done, but it appears that it is done in order to ensure that the electrical and physical connections between other parts and the plate are good and clean. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the metal base plate of Flickinger to be polished as taught by Kubozuka, since such a modification

would provide the metal base plate with a better electrical connection to its constituent parts.

Response to Arguments

13. Applicant's arguments filed 11/14/2006 have been fully considered but they are not persuasive.

14. Applicant argues that Flickinger does not anticipate the present invention because there is no disclosure of a stamped metal base plate, and that using cutting or casting techniques is expensive and wastes material, whereas stamping is cheaper and requires only one production step. In response, it is noted that product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps; "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 227 USPQ 964. Regarding the process for making the claimed projectile or the **Product by Process** Claims, applicant is directed to MPEP § 2113. Therefore the metal base plate being formed by a stamping process is not pertinent in this instance to the patentability of this product claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stewart T. Knox whose telephone number is (571) 272-8235. The examiner can normally be reached on Monday through Thursday, 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on (571) 272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stewart Knox

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Troy Chambers
Primary Examiner
Art Unit 3641

30 November 2006